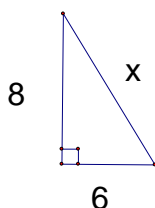


Name \_\_\_\_\_

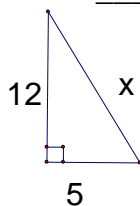
Date \_\_\_\_\_

201 Pythagorean Theorem and the Converse (Figures are not drawn to scale.)  
(Answer in simplified radical form.)

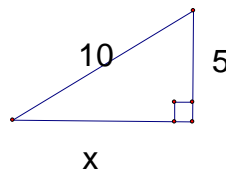
1. \_\_\_\_\_



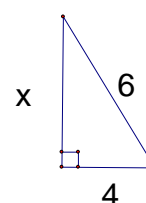
2. \_\_\_\_\_



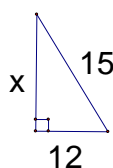
3. \_\_\_\_\_



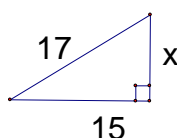
4. \_\_\_\_\_



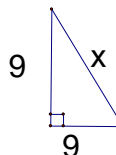
5. \_\_\_\_\_



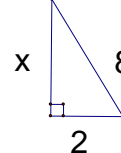
6. \_\_\_\_\_



7. \_\_\_\_\_



8. \_\_\_\_\_



Determine if the numbers represent a triangle, if they do, then classify it as acute, right, or obtuse.

9. \_\_\_\_\_ 8,10,11

10. \_\_\_\_\_ 2,5,6

11. \_\_\_\_\_ 12,13,17

12. \_\_\_\_\_ 8,15,17

13. \_\_\_\_\_ 4,4,4

14. \_\_\_\_\_ 4,5,9

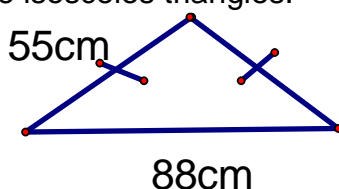
15. \_\_\_\_\_ A(-7, -3) B(-4, -1) C(0, -6)

**16. The sides and classification of a triangle are given below. The length of the longest side is the integer given. What value(s) of  $x$  make the triangle? (Note: you may need to use quad. Form.)**

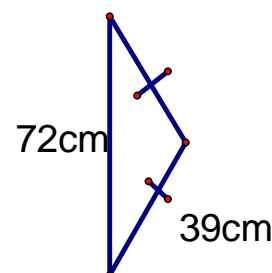
a.  $x, x, 10$ ; obtuseb.  $x, x+4, 10$ ; acute

Find the area of the isosceles triangles.

17. \_\_\_\_\_

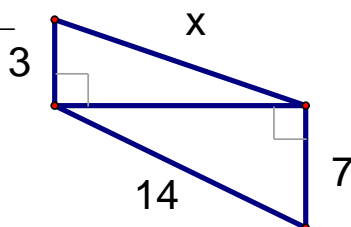


18. \_\_\_\_\_

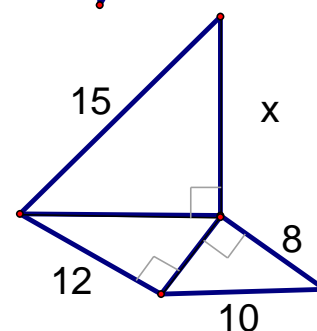


Solve for  $x$  in the given picture.

19. \_\_\_\_\_

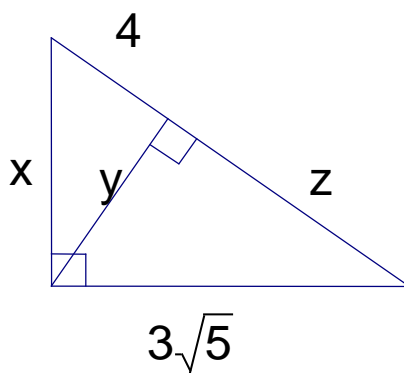


20. \_\_\_\_\_

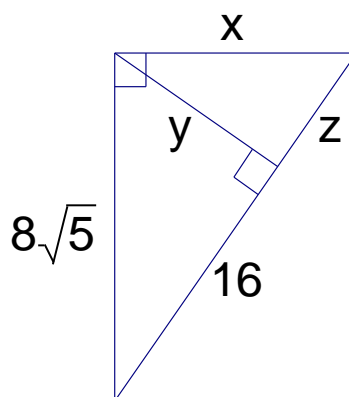


201 7.3 Geometric Mean—Find  $x$ ,  $y$ , and  $z$ . (Figures not drawn to scale.)

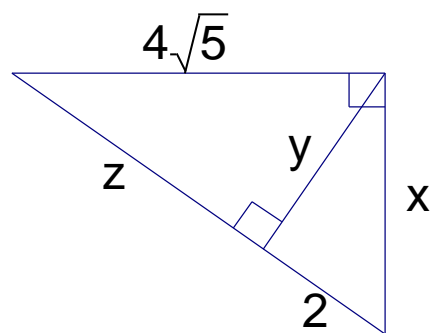
1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



4. \_\_\_\_\_

